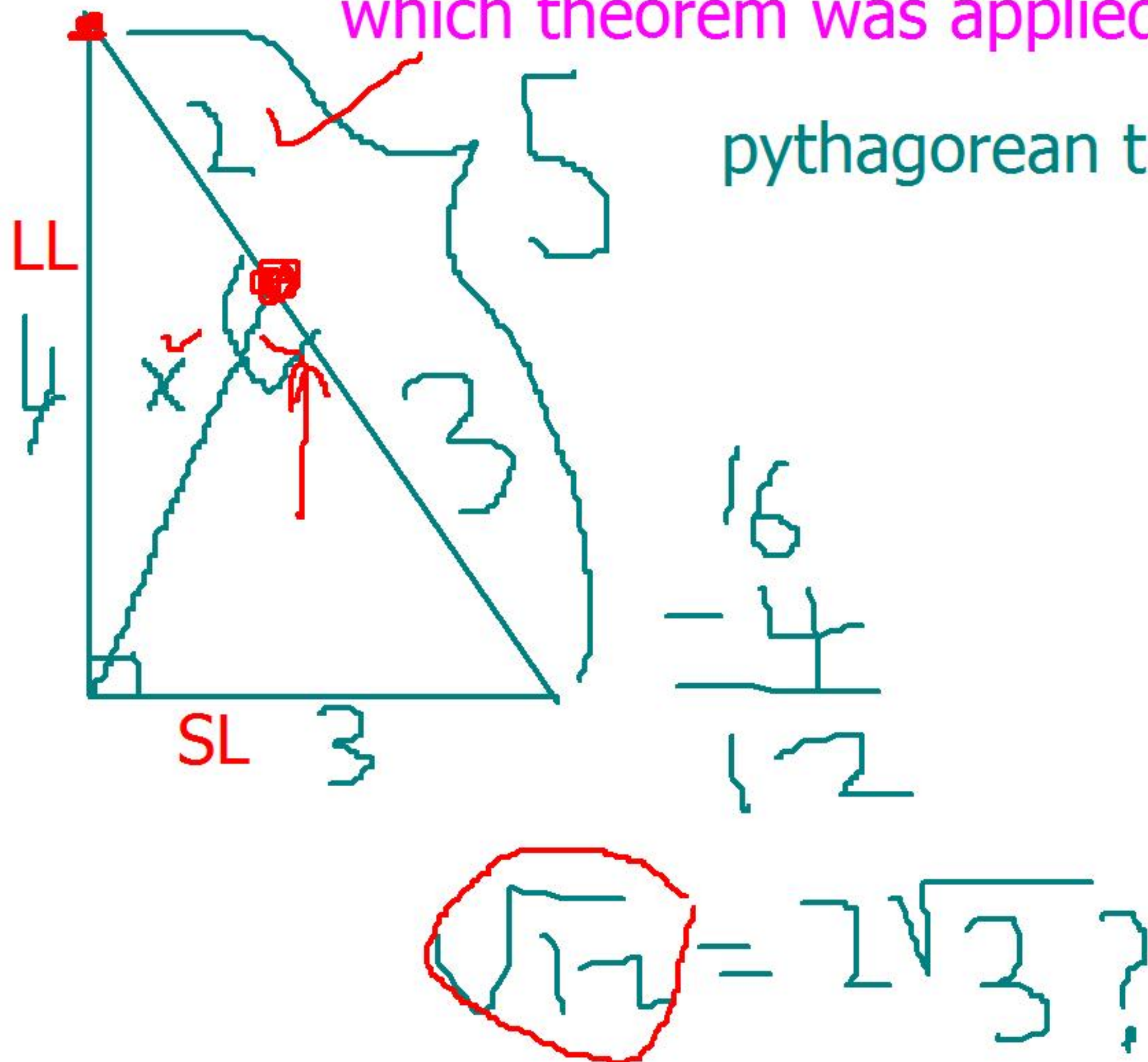


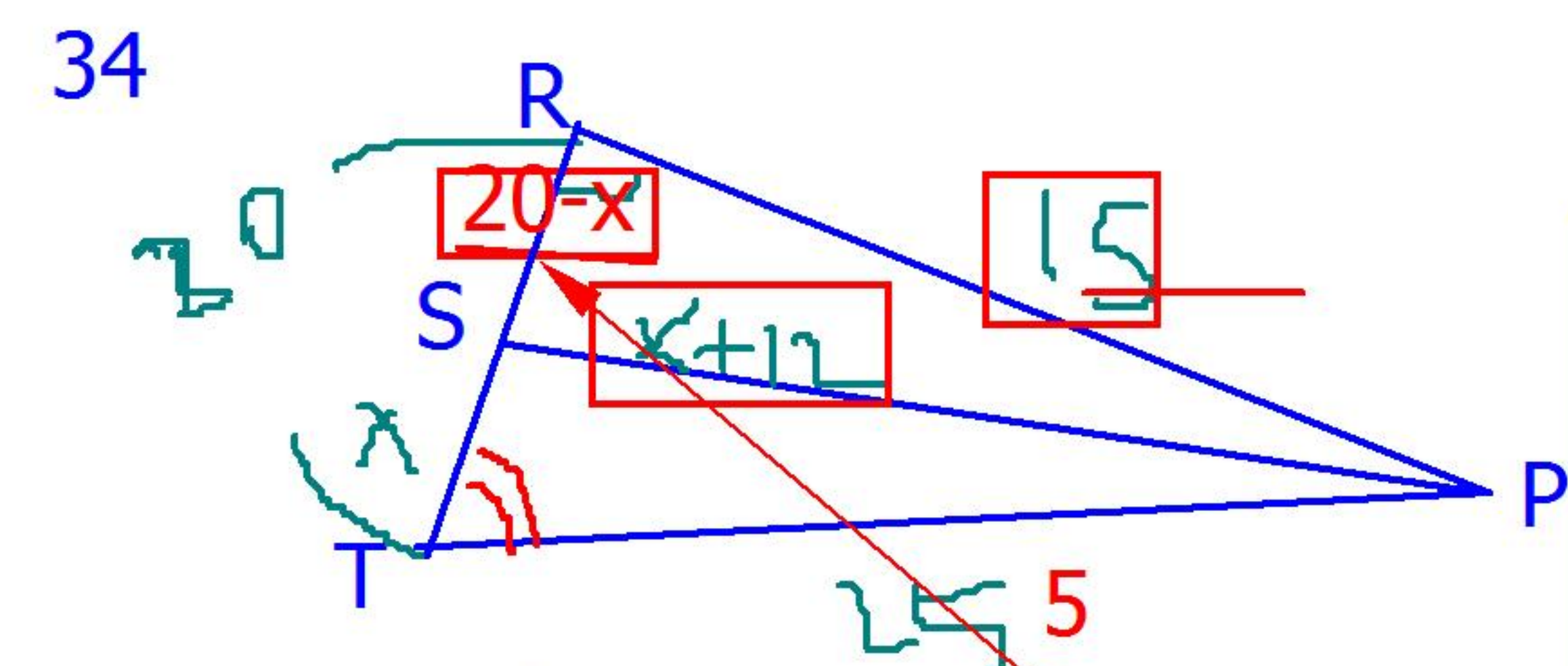
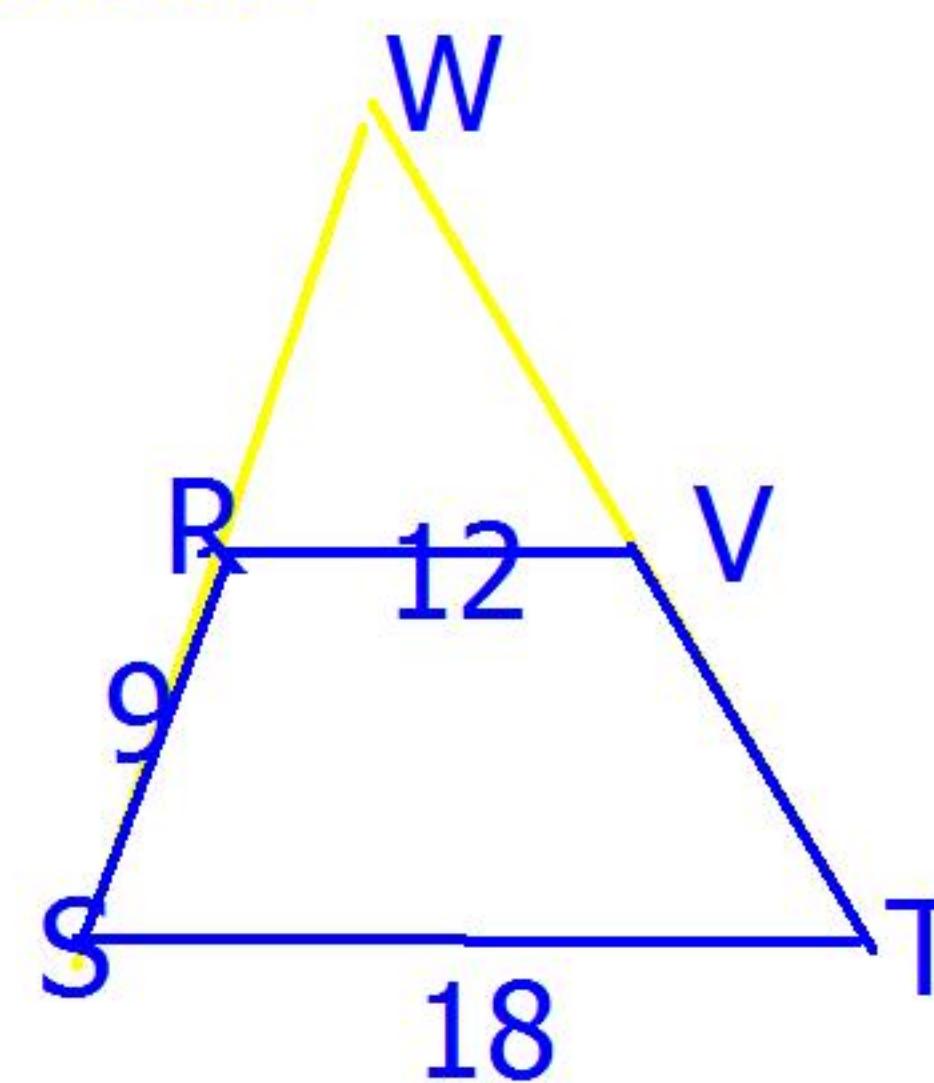
32. The legs of a right triangle have lengths of 3m and 4m. A point on the hypotenuse is 2m from the intersection of the hypotenuse with the longer leg. How far is the point from the vertex of the right angle?

which theorem was applied?

pythagorean theorem



33. RSTV is an isosceles trapezoid with $RS=9$, $RV=12$, and $ST=18$. Find the length of the perpendicular segment from T to SW.



Given $\overline{PR} \perp \overline{RT}$, $PT=25$, $PR=15$
 $PS=ST+12$. Find SR.

$$RT = \sqrt{25^2 - 15^2} = 20$$

$$64x = 481$$

$$x = 7.5$$

$$20 - x = 12.5$$

triangle RSP, RTP are similar ?

$$15:x+12=15:25$$

$$x=13$$

$$SR=20-13=7$$

35. Abigail Adv took a shortcut along the diagonal of a rectangular field and saved a distance equal to $\frac{1}{3}$ the length of the longer side. Find the ratio of the length of the shorter side of the rectangle to that of the longer side.